

CORYNDON MEMORIAL MUSEUM EXPEDITION TO
THE CHYULU HILLS.

VII.

THE WEEVILS (COL. CURCULIONIDAE) OF THE CHYULU
HILLS, KENYA. COLEOPTERA. PART 2.

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The expedition organised by the Coryndon Memorial Museum for the investigation of the fauna and flora of the Chyulu Range succeeded in securing some 1,130 specimens of beetles of the family *Curculionidae*, which Dr. V. G. L. van Someren has kindly entrusted to me for study.

Such attempts to elucidate the faunas of isolated ranges are undoubtedly of considerable scientific value, even though the present material cannot be regarded as fully representative of the area explored, because the collecting was carried out during less than four months and at a season when insects were probably not at their greatest abundance. Nevertheless several interesting points emerge from it, even though deductions regarding the distribution of the species must at present remain purely tentative, because it is doubtful whether we yet know more than about 10 per cent. of the weevils that occur in Kenya.

The collection comprised 104 species, of which 43 were previously known, while 29 are here described as new, and 32 remain unidentified, these being represented by only single specimens or by material that was otherwise inadequate. Probably some 25 of the undetermined species will prove to be undescribed, so that over half the species may be regarded as new to science.

An interesting point is the occurrence of various genera which in other parts of East Africa have been regarded as entirely alpine or subalpine, not occurring below 7,000 to 8,000 feet; yet in the Chyulus they have been found at so comparatively low an altitude as 5,600 feet. These genera are: *Ischnobrotus*, *Subleptospyris*, *Parasystates*, and *Pseudomesites*.

It was anticipated that the fauna of the Chyulus might show a somewhat intermediate relationship between that of the highlands to the north-east and that of the Kilimanjaro range to the south-west, which is stated to be only 45 miles distant as the crow flies; and it is understood that such an intermediate character has been found in certain other groups. But this certainly does not yet appear to be the case in the *Curculionidae*.

From Kilimanjaro and Meru Aurivillius recorded 89 named species (collected by Professor Sjöstedt), to which Hustache subsequently added another 33 (collected by Messrs. Alluaud and Jeannel), making 122 in all, many having been taken at low alti-

tudes. As noted above, 72 named species are now recorded from the Chyulus. Yet only eight species are common to the two lists, and of these no less than seven are widely distributed in East Africa and have no bearing on the question. Thus there is at present only one species (*Isoramphus acalloides*, Hust.) that is known only from Kilimanjaro and the Chyulus; and this is a wingless insect, the habits of which have not been recorded.

Dr. van Someren has also recently sent me a small lot of weevils from the Teita Hills for comparison, but this contained very few of the smaller species. With this and other records a list of 54 known species has been compiled and I have some 12 others which are probably new. Of these 66, only four species have been found in the Chyulus, and three of them are widespread insects. But the difference in the two faunas is even more strongly brought out by the fact that in the comparatively short Teita list there are no less than 21 genera not yet recorded from the Chyulus.

It is possible that some indication of the affinities of the Chyulu fauna may be gathered by an examination of the distribution in other parts of Kenya of any of the new species. The results are as follows:—

Teita Hills: one species, *Apotmetus vansomereni* (wingless).

Nairobi: two species, *Mitophorus largus* (wingless) and *Apion stichocheatis*; these will probably prove to be rather widely distributed.

Chania Falls, Thika (alt. about 4,500 ft.): five species, *Caderus lepidus*, *Ischnobrotus gedyei*, *Mitophorus largus*, *Endaeus sublucidus* and *Cossonus fossatirostris* (only the first three wingless).

These figures suggest that the volcanic Chyulu Range has possibly been colonised from the highlands to the north-west, rather than from the ranges lying alongside of it.

The topography of the area has already been fully discussed by Dr. van Someren in this Journal (Vol. XIV, pp. 1-14).

The types of the new species are being deposited in the British Museum, and cotypes will be found in the Coryndon Memorial Museum, Nairobi.

Family CURCULIONIDAE.
Subfamily BRACHYDERINAE.

Blosyrus rugulosus, Aur.

Three examples, June-July, 5,600 feet. Occurs fairly widely in Kenya, extending into Abyssinia.

Dereodus vagabundus, Fst.

One example, June, 2,500 feet. Widely distributed throughout East and South Africa.

Tapinomorphus humerosus, sp. n. (Plate 1, fig. 3.)

♂ ♀. Derm piceous, shiny, with minute grey or yellowish scales with a coppery reflection which are isolated and rather unevenly distributed; pronotum usually with three very indefinite narrow stripes of denser scales, the median one often obsolescent; elytra with an indefinite irregular common curved band across the top of the declivity; underside shiny, with sparse short recumbent setae.

Head rugulose, with fairly dense scaling and a deep frontal sulcus; eyes moderately convex. *Rostrum* stout, a little longer than broad, almost parallel-sided, the genae being only slightly dilated; the dorsal area flat, rugulose, with three fine inconspicuous carinae, sometimes hidden by scales, some of which are often green; the interantennal area not declivous, the epistome undefined. *Antennae* ferruginous, with the club fuscous; scape abruptly clavate, without scaling but with short erect setae, funicle with joint 1 longer than 2, 4-7 moniliform. *Prothorax* transverse (6: 8.5) strongly rounded laterally, widest at the middle, the base gently arcuate; the dorsum almost flat longitudinally in the middle, closely set with large deep punctures that are largely concealed by scaling, with a shallow transverse impression on each side near the apex. *Elytra* of ♂ rotund, as broad as long, widest at one-fourth from the base and there strongly rounded owing to a broad subhumeral dilatation, thence narrowing rapidly, and broadly rounded behind, the base subtruncate; the dorsal outline gradually rising from the base to beyond the middle, then sloping steeply backwards and almost vertical at the apex; the broad striae with large deep close round punctures, which diminish behind; intervals scarcely broader than the striae and slightly convex, interval 1 with a row of small granules on the basal fourth, 3 usually somewhat raised at the base and with an obtuse squamose tubercle at the top of the declivity; the scales small and elongate, the short curved setae inconspicuous on the disc, more erect behind; elytra of ♀ more subquadrate (7:6), being almost parallel-sided in the middle, the humeral dilatation reduced to an obtuse lateral angulation usually visible from above, the tubercle on interval 3 much reduced or obsolete, intervals 3 and 6 somewhat elevated at the base. *Legs* rather slender, piceous, with the apex of the tibiae and the tarsi testaceous; femora with sparse narrow scales having a metallic reflection and recumbent setae.

Length 2.4—3.0, breadth 1.5—1.9 mm.

Alt. 5,200 ft., 17 ♂ 23 ♀, iv-v. 1938; 5,600 ft., 43♂ 57♀, iv, vi, vii, 1938.

Of the two previously described species, *T. setosus* and *metallicus*, Hartm., 1904, occurring in Tanganyika, the male of

the former differs from the present species *inter alia* in having no posterior tubercles on the elytra and the subhumeral dilatation is angulate instead of broadly rounded, while the pronotum is remotely punctate and the two basal joints of the funicle are equal; in the female the subhumeral angulation does not project laterally.

T. metallicus is clothed with metallic red or green scaling, and the elytra bear a slight obtuse elevation behind the middle on interval 6 only in the male, and on 5 and 6 in the female.

Tapinomorphus socors, sp. n.

♀. Derm piceous, shiny, with dense uniform grey or brownish scaling, which entirely conceals the integument except the striae on the elytra.

Allied to *T. humerosus* but a good deal smaller; agreeing with the description of that species except in the following particulars: Prothorax rather more transverse, more strongly rounded laterally, widest well behind the middle, more deeply constricted at the apex, strongly arcuate at the base, with the basal angles entirely rounded off. Elytra broadly oval, with the sides moderately and regularly rounded, deeply sinuate at the base, more broadly rounded at the apex, the subhumeral angulation obtuse, not projecting laterally and quite invisible from above; the intervals broader than the striae and of equal width, 3 and 6 not raised at the base, and without any trace of posterior tubercles; the raised spatulate setae paler and rather more conspicuous.

Length 2.0—2.6 mm., breadth 1.2—1.5 mm.

Alt. 5,200 ft., 2 ♀, iv, 1938; 5,400 ft., 3 ♀, iv-v, 1938; 5,600 ft., 4 ♀, iv, vi, 1938.

The females of *T. setosus* and *metallicus*, Hartm., differ in having the prothorax much narrower and widest at the middle; in the former the alternate intervals of the elytra are wider, and the latter has posterior elevations on intervals 5 and 6.

Subfamily OTIORRHYNCHINAE.

Cadoderus lepidus, sp. n. (Plate 1, fig. 1.)

♂ ♀. Derm piceous, entirely concealed by dense scaling; head and rostrum light brown, often with a narrow median dark stripe; prothorax broadly dark brown on the disc, with a narrow median light brown stripe, light brown laterally, with a dark brown dorso-lateral stripe and another on the pleurae, and a few green scales in the basal angles; elytra dark brown dorsally, with the suture light brown throughout, interval 2 pale on the declivity (sometimes with a few green scales), intervals 3-6 with metallic green (sometimes coppery) scaling at the base and a short stripe on the declivity, that on 3 being the longest, 7 green

throughout, 8 greenish on the basal half and dark brown behind, 9 light brown throughout, 10 dark but becoming pale at the apex.

Head with scales concave and a row of erect spatulate setae by each eye; forehead twice as broad as an eye, with a median stria; eyes prominent, highest behind the middle. *Rostrum* longer than broad, parallel-sided in the basal half, somewhat roundly dilated at the genae; the dorsal area almost parallel-sided, flat, with a few erect clavate setae, steeply declivous and not excavated at the apex; scrobes almost parallel, the genae with numerous stout suberect pale setae. *Antennae* with the scape very stout, slightly curved, gradually widening from base to apex, densely squamose, and with very long stout suberect curved setae; funicle slender, red-brown, without scaling, joint 1 longer than 2, 3 and 4 longer than broad, 5-7 moniliform. *Prothorax* gradually widening from the bsa to beyond the middle, then narrowing more rapidly and shallowly constricted near the truncate apex, the base feebly arcuate; the dorsum almost flat longitudinally, with a broad shallow transverse depression on the apical fourth, and a small shallow round impression on each side behind the middle; sculpture entirely hidden by the dense concave scales; a few erect clavate setae along the apical margin. *Elytra* ovate, broadest at about the middle, obtusely acuminate behind, feebly sinuate at the base, the apex slightly produced downwards in ♀; the dorsum convex highest at about the middle, the punctures in the deep striae visible through the scaling, the intervals convex, 2 and 4 bearing very broad suberect scale-like setae, which on the declivity (also on int. 6) become much longer, lanceolate and erect. *Legs* with dense pale brown scaling and stout suberect setae, the femora with a large lateral dark patch in the middle and a small dorsal one near the apex; the tibiae with two minute teeth close to the mucro, the anterior pairs slightly curved inwards at the apex.

Length 2.7—3.5 mm., *breadth* 1.3—1.8 mm.

Kenya Colony: Chyulu Hills, 5,600 ft., 4 ♂, 5 ♀, vi. 1938 (type); Chania Falls, Thika, 5,050 ft., 1 ♂, i, 1921 (A. F. J. Gedye).

Nearly allied to the genotype, *C. bellus*, Fst., which differs in having a stripe of green scales along the suture, the propleurae being also green, the rostrum is parallel-sided, and the genae lack the stout setae; the eyes are much larger and almost flat; the antennal scape is much more slender, with fine subrecumbent setae, the two basal joints of the funicle are equal, 1 being hardly thicker than 2, and the distal joints much longer than broad; the prothorax is not constricted at the apex; the elytra are truncate at the base; and the anterior pairs of tibiae are distinctly curved throughout.

Ischnobrotus gedyei, sp. n. (Plate 1, fig. 2.)

♂ ♀. Derm black, with dense scaling that is very variable in coloration; general ground-colour (including underside) grey to pale fawn; prothorax with a variable irregular broad median stripe of dark brown divided down the middle by a narrow pale line; elytra (in fully marked examples) with the disk dark brown as far as stria 6, the posterior margin of the area being produced into a long angle on the suture on the upper half of the declivity, with pale patches at the base of intervals 3 and 5; in the middle of the disk a common transverse pale patch extending laterally to stria 3 and deeply sinuate anteriorly and posteriorly, and there is frequently a broad oblique pale band (often reduced or macular) connecting the median pale patch with the pale lateral area at the shoulder; very rarely the whole dorsal area may be dark brown, or with only an elongate pale spot on intervals 3 and 5; but more often the dorsum is pale greyish brown, so that the pale median patch becomes faint or may be almost obliterated.

Head separated from the rostrum by an almost transverse incision, the forehead flat, with a short stria; eyes less convex than usual. Rostrum a little longer than the head, almost parallel-sided, slightly transverse, the dorsal area flat or shallowly depressed down the middle; the sculpture hidden by scaling, the spaces between the scrobes and the epistome not depressed. Antennae comparatively short and stout; scape only shortly exceeding the front margin of the prothorax, widening from base to apex, with dense overlapping scales and stout subrecumbent setae; funicle with the two basal joints equal, 3 twice as long as broad, 4 shorter, 5-7 globular. Prothorax transverse (5:6), feebly rounded laterally, widest at a little behind the middle, very shallowly constricted at the apex, slightly arcuate at the base; the dorsum with a very shallow median stria which reaches neither base nor apex and is almost concealed by scaling, and on each side of it two large rounded shallow impressions, one before the other behind the middle, the rugulose sculpture entirely hidden by scaling, the very short scale-like setae appressed. Elytra of ♂ broadly ovate, shallowly sinuate at the base, with the line from the basal angle to the feeble subhumeral callus on interval 7 straight, obtusely rounded at the apex; elytra of ♀ with the subhumeral callus more strongly developed, the line from it to the basal angle more or less sinuate, and the apex more acuminate; the well-marked striae containing round separated punctures, which owing to the dense scaling appear only as small narrow slits; intervals 1, 3, 5 very slightly more raised on the disk, but 5 forming an obtuse elongate callus at the top of the declivity; no bare scutellar callus at the base; all the intervals with a row of spatulate setae, which are short and subrecumbent.

on the disk, and much longer and suberect behind, being rather more numerous on the higher intervals. Legs densely squamose, the tibiae with broad lanceolate suberect setae.

Length 4.5-7.0 mm., breadth 2.5-3.5 mm.

Kenya Colony: Chyulu Hills, 5,200-5,600 ft., 53 ♂ 48 ♀, iv, vi, vii, 1938 (type); Thika, 1 ♂, vi, 1938. (A. F. J. Gedye.)

In Hustache's key to the genus *Ischnobrotus* (Ann. Mag. N.H. (19) xviii, 1936, p. 363) this species runs down to *I. kenyae*, Hust., 1929, which however differs in having the scape finely pubescent and not squamose; joints 3-7 of the funicle are globular; and the elytra lack the posterior prominence on interval 5, as well as the projecting subhumeral callus in the female.

Entypotrachelus niger, Hust.

2 ex., June 5,600 ft., July 6,600 ft. Described from two specimens taken in the crater of Longonot, in the Rift Valley.

Apotmetus vansomereni, sp. n. (Plate 1, fig. 7.)

♂♀. Derm piceous, uniformly covered with bright metallic green scaling, which is not contiguous but forms irregular rings round the punctures; underside with the green scaling confined mainly to the lateral areas of the sternum and the two basal ventrites.

Head with the very shallow punctuation concealed by scaling, the forehead with a deep median sulcus, the eyes moderately convex. Rostrum separated from the head by an almost transverse incision, longer than broad, parallel-sided in the basal half, with the genae roundly dilated; the dorsal area almost flat, with its lateral margins not defined posteriorly, finely rugulose, with a very low median costa (sometimes obsolescent); the declivous interantennal area concave, containing a low angulate transverse carina behind the margin of the epistome, which is obtusely curved. Antennae with the scape rugosely punctate, bearing scattered elongate green scales and numerous stout curved setae; funicle with rather dense whitish setae, joint 2 slightly shorter than 1. Prothorax slightly transverse, parallel-sided from the base to beyond the middle, then gradually narrowing to the apex, which is feebly sinuate, the base slightly arcuate and very narrowly marginate; the dorsum flat longitudinally, convex transversely, without any discal depression, set with very low separated oval granules, without any median stria or carina, the interstices filled with green scaling. Elytra of ♂ subrotund, only a little longer than broad (6.5:5.7 mm.), widest at about the middle, almost flat dorsally, with the posterior declivity rather abrupt and almost perpendicular, the apex broadly rounded, the base shallowly sinuate; elytra of ♀ differing in being much narrower and almost parallel-sided in the middle, with a small humeral tubercle and two others between it and the basal angle;

the striae very shallow (not easily distinguished unless viewed obliquely from behind), there being four or five accessory ones in addition to the normal ten, all containing a regular row of isolated round punctures, which on the disk are separated by small flattened granules, these granules tending to coalesce laterally to form irregular transverse wrinkles; the intervals broader than the striae, usually bearing indistinct transverse granules and irregular rows of inconspicuous short appressed setae, the scales almost round. Legs red-brown, with sparse yellowish subrecumbent setae, the apices of the femora and tibiae blackish with green scaling, the tarsi blackish; femora coriaceous, the tibiae rugulose, the corbels of the hind pair very narrowly enclosed, joint 2 of the hind tarsi as long as broad.

Length 7-11 mm., breadth 4-7 mm.

Kenya Colony: Chyulu Hills, 5,600 ft., 63 ♂, 43 ♀, vi-vii, 1938 (type); Mt. Mbololo, 5,000 ft., N.E. Teita Hills, 9 ♂, 6 ♀, x, 1938.

This very striking species may be readily distinguished from its previously described congeners by its bright green scaling, the convex pronotum, the accessory striae on the flattened elytra, and the tridentate humeral area in the female.

[It seems desirable to describe here a closely allied species from the adjoining Teita Hills.

Apotmetus dilatatus, sp. n.

The description of *A. vansomereni* applies to this species except in the following details:—

♂ ♀. The green scaling on the prothorax is confined to the disk of the pronotum where it forms three indefinite stripes; on the elytra the scaling is also more restricted, the dorso-lateral margins, the suture and the whole of the posterior declivity being entirely bare and shiny; the inflexed margins of the elytra are also bare except for a stripe of green scaling along the two or three outermost intervals (often abraded); on the underside there are greenish yellow scales at the sides of the sternum only.

Prothorax flattened dorsally (but not depressed), especially in ♂. Elytra more dilated and much more strongly rounded in ♂, being as broad as long, with a tumid elevation on each side of the apex, the median area of the declivity being depressed; the punctures rather larger and shallower, without definite intervening granules; elytra of ♀ also proportionately broader and less convex, the three humeral denticles more prominent, the hind one developed into a short raised carina, and the upper part of the posterior declivity flattened transversely.

Length 8-11 mm., breadth 5-7 mm.

Kenya Colony: Wandanyi, 5,000 ft., Teita Hills (north central), 13 ♂, 4 ♀, iii, 1939.]

Parasystates cinereus, sp. n.

♂ ♀. Derm black; prothorax with only a loose lateral patch of whitish scales at the apical and basal angles, which may sometimes unite to form a lateral stripe; elytra closely covered dorsally in ♂ with minute, grey scales which are not actually contiguous (less dense in the middle of each elytron in ♀), the dorso-lateral margins (intervals 7 and 8) almost bare, the deflexed margins with fairly dense recumbent grey pubescence and scattered narrow whitish scales which become dense on the basal third (often abraded); underside with rather sparse grey setae, and a narrow fringe of white scales in front of the hind coxae.

Head bare, with rugulose punctation and a deep frontal fovea; eyes moderately convex, highest at the middle. Rostrum a little longer than broad, almost parallel-sided in the basal half then widening apically; the dorsal area flat, gradually widening from base to apex, with very shallow confluent punctation and sometimes a mere trace of a median costa. Antennae black, with the funicular joints 1-6 progressively diminishing in length, 7 as long as 3, all longer than broad. Prothorax somewhat broader than long, moderately rounded laterally, widest beyond the middle, feebly constricted at the apex; the dorsum with a longitudinal flattened area in the middle of the disk, covered with large confluent flattened granules which become much smaller and isolated laterally; in the middle of the disk there is a large shallow depression behind the middle and a smaller one in front of it, and a rounded depression on each side behind the middle, but these depressions are sometimes obsolete, especially the lateral ones; the sparse whitish setae transversely recumbent. Elytra of ♂ ovate, very shallowly sinuate at the base, absolutely flat both longitudinally and transversely as far as interval 6 in the middle but rather steeply declivous at the base, the posterior declivity very short and steep, the apices feebly dehiscent, the dorsal margins rounded off and not carinate, stria 6 visible from above; the rather broad shallow striae containing shallow punctures separated by very small shiny granules on the deflexed margins as well as on the dorsum; the intervals flat, with irregular (often duplicated) rows of round shiny granules which are much larger than those in the striae, interval 2 obtusely raised on the declivity, the setae extremely minute and recumbent on the disk, longer and suberect on the declivity; elytra of ♀ only slightly broader, more acuminate behind, with the posterior declivity less steep, the dorsum moderately convex both longitudinally and transversely, highest in front of the middle, the discal area between striae 1 and 4 irregular with raised transverse ridges. Legs black, with the femora red-brown except at base and apex, finely rugulose, with small flattened granules and

rather sparse pale recumbent setae. Venter of ♀ without any median sulcus on ventrite 5, but with only a very indefinite basal impression.

Length 10.5-12.2 mm., breadth 4.6-5.7 mm.

Alt. 5,600 ft., 10 ♂, 5 ♀, vi-vii, 1938.

The nearest ally is *P. minor*, Aur., 1910, from Kilimanjaro, which has the elytra of the ♂ distinctly convex longitudinally, without any basal declivity, and with the dorso-lateral margins sharply costate posteriorly; the prothorax is not flattened in either sex; the elytra of the ♀ are not declivous at the base and have no transverse wrinkles on the disk.

Subleptospyris sparsuta, sp. n. (Plate 1, fig. 8.)

♂ ♀. Dull black; prothorax with a very indefinite interrupted curved lateral stripe of pale scales from the basal angles to beyond the middle; elytra with minute non-contiguous dark grey or brownish scales and rows of indefinite paler grey spots on intervals 2, 4 and 7; underside with short sparse recumbent grey setae.

Head shallowly rugulose, with sparse recumbent grey setae, the frontal fovea shallow; eyes only moderately convex. Rostrum a little longer than broad, with the mandibles prominent, gradually narrowed from the base to the antennae and rather broadly dilated at the genae; the dorsal area flat, very obtusely marginate laterally, shallowly rugulose, with a trace of a median carina; the interantennal area shallowly impressed on each side, the epistome quite indefinite. Antennae with the scape gradually clavate, with short subrecumbent setae; funicle with joint 1 half as long again as 2, 3 longer than 4, 4-7 subequal, elongate and clavate. Prothorax transverse (5:6), gently rounded laterally, widest at the middle, somewhat narrower at the truncate apex than at the feebly arcuate base; the dorsum slightly convex longitudinally, highest behind the middle, finely rugulose, with small low scattered granules, without any smooth median line, and with sparse pale transversely recumbent setae. Elytra ovate, somewhat broader in ♀, sinuate at the base, the apex obtusely acuminate in ♂, more pointed and slightly produced in ♀; the dorsal outline moderately convex, highest before the middle, gradually declivous behind, slightly flattened transversely in ♂, more convex in ♀; scarcely striate, the numerous rows of rather deep round separated punctures more or less irregular, except two or three rows adjoining the lateral margins; the setae very short, recumbent and inconspicuous, except on the declivity where they are a little longer and suberect, and in ♀ a row of four or five long erect setae on interval 1 on the upper part of the declivity. Legs black, with sparse pale setae; femora

coriaceous, with a band of dense narrow whitish scales; tibiae not compressed, with a few scattered round whitish scales, the front pair curved inwards at the apex, the hind pair sharply denticulate. Underside very finely shagreened.

Length 5.5-7.3 mm., breadth 2.3-3.8 mm.

Alt. 5,600 ft., 24 ♂, 23 ♀, vi-vii, 1938.

The only other known species of the genus, *S. turbida*, Mshl., 1932, is a larger shiny scaleless insect, with the tibiae not compressed and the front pair not curved; the distal joints of the funicle are much shorter, the venter rugulose, etc.

S. turbida was found on a giant *Senecio* at 12,000 feet on Ruwenzori.

Systates egenus, Fst.

6 ex., April, 5,400-5,600 ft. Previously known only from Usambara, Tanganyika.

Systates latirostris, Hust.

2 ex., June, 5,600 ft. Previously known in Kenya from Mombasa and Sekope, and from near Lake Albert, Uganda.

Systates sobrinus, sp. n.

♂ ♀. Derm black, moderately shiny; pronotum without markings; elytra, when unabraded, with rows of small spots formed of three or four narrow pale scales with a coppery reflection on the typical intervals, the accessory intervals with at most a row of single distant scales, but the scaling is nearly always more or less abraded; underside with sparse narrow coppery scales, which are a little broader and denser on the sides of the sternum, and numerous curved erect soft whitish setae.

Head with variable punctuation and sparse scaling, the frontal sulcus deep, the eyes only moderately convex. Rostrum separated from the head by an almost transverse furrow, a little longer than broad, gradually narrowing from the base to one-third, then widening to the dilated genae; the dorsal area almost flat, with shallow rugose punctuation and a strong median carina, its lateral margins obtuse, narrowing slightly from the antennae to the base; the interantennal area scarcely declivous, the hind margin of the epistome sharply defined throughout. Antennae black, with fine recumbent grey pubescence; scape moderately slender, abruptly clavate; funicle with joint 1 about one-third longer than 2. Prothorax transverse (♀ 7:9, ♂ 8.11), rounded laterally, widest at the middle, feebly constricted at the apex, more deeply so at the base, which is slightly narrower, both being truncate; the dorsum strongly convex longitudinally, highest far behind the middle, steeply declivous at the base

which is lower than the apex, closely set with low granules, without any median stria or carina; a few narrow pale scales and inconspicuous recumbent setae. *Elytra* narrowly ovate in ♂, much broader in ♀, subtruncate and immarginate at the base, obtusely rounded at the apex, without any trace of a basal constriction; the dorsum moderately convex longitudinally, sloping towards the base (more steeply in ♀) and steeply declivous (♂) or perpendicular (♀) at the apex, the rows of punctures duplicated in confused pairs, the typical intervals being fairly distinct and much broader than the irregular accessory ones, and bearing a row of setae which are short and suberect on the disk, becoming longer and erect on the posterior declivity; the typical intervals also bear low granules on the apical half. *Legs* entirely black, with rather sparse narrow pale coppery scales; both femors and tibiae in the ♀ only with a fringe of long erect setae on the lower face; hind tibiae of ♂ with the inner sinuation comparatively shallow, occupying less than half the length of the tibia and gradually disappearing above without forming any angulation.

Length, ♂ 8.5-9.0, ♀ 9-10 mm.; breadth, ♂ 3.7, ♀ 4.2-5.0 mm.

Alt. 5,200 ft., 1 ♂, 2 ♀, iv-v, 1938; alt. 5,600 ft, 3 ♂, 5 ♀, iv, vi, 1938 (type).

Nearly allied to *S. (Isaniris) ater*, Mshl., 1920, from S. Rhodesia and Nyasaland, and *S. otiorrhynchoides*, Hust., 1923, from the Belgian Congo. The former differs in having the rostrum shorter, much less dilated at the genae, and the margin of the epistome obsolete; the eyes less convex; the pronotum only slightly sloping at the base; the typical intervals on the elytra almost as narrow as the accessory ones; and the sinuation on the hind tibiae of the ♂ deep, longer than half the tibia, and terminating above in a sharp angulation.

S. otiorrhynchoides differs also in having the rostrum shorter, with the epistomal margin obsolescent in the middle; the eyes are more convex; the pronotum almost flat longitudinally at the base; the elytra less steeply declivous at the base and the rows of punctures irregular, not paired; and the sinuation on the hind tibiae of the ♂ is deeper, less than half the length of the tibia, and terminating above in an obtuse angulation.

S. rubripes, Hust., 1923, from Tanganyika, also belongs to this group, but may be readily distinguished by its red legs and antennae.

Systates chyuluanus, sp. n.

♂ ♀. Derm bronze-black, rather shiny, with very sparse irregular recumbent whitish setae and rows of longer erect ones.

Head with strong, partly confluent punctures, the median sulcus broad and deep; eyes moderately convex. *Rostrum* a little longer than broad, gradually narrowing from the base to the antennae, with the genae rather strongly dilated; the dorsal area narrowing anteriorly from the base, its margins obtusely angulate, the disk with very shallow large confluent punctures and a distinct smooth median carina; the interantennal area declivous, flattened transversely, impunctate; epistome with the posterior margin broadly arcuate. *Antennae* testaceous brown, elongate; scape slender, abruptly clavate, with rather long suberect setae; funicle with all the joints elongate, 1 a little longer than $2 + 3$, $3 - 6$ progressively diminishing, 7 as long as 5. *Prothorax* transverse (3:4), rounded laterally, widest at the middle, the apex very slightly narrower than the base, both being truncate; the dorsum gently convex longitudinally, highest behind the middle, set with low granules which are somewhat convex laterally but greatly flattened on the disk, being usually almost obliterated on the anterior third; frequently there is a fine shallow median stria (when the discal granules are well developed), and rarely the whole disk may be almost smooth and shiny. *Elytra* ovate in ♂, and appreciably broader in ♀, subtruncate and immarginate at the base, and only very slightly produced downwards at the apex in ♀; the dorsal outline sloping very steeply at the base and almost perpendicular at the apex in ♀, much less steep at both ends in ♂, with regular rows of small deep punctures, all the rows being duplicated; but the accessory intervals are exactly like the typical ones (which may be recognised by bearing a rather sparse row of long erect setae), so that the rows of punctures are not in any way paired; in good specimens the recumbent pale setae are not generally distributed but occur in groups of 2-4, producing a vaguely spotted appearance. *Legs* with the femora red-brown, with subrecumbent setae; the tibiae and tarsi paler; tibiae slender, smooth, with fine obsolescent punctuation, hind pair of ♂ rather deeply sinuate on the apical half of the inner face, the flattened surface of the sinuation being smooth and glabrous.

Length 5.0-6.5 mm., breadth 2.4-3.0 mm.

Alt. 5,600, 50 ♂, 35 ♀, vi-vii, 1938.

Very closely allied to *S. villosus*, Hust., 1929, from the Aberdare Mts., but the latter species differs in the following characters: the rostrum is parallel-sided in the basal half, the genae much less dilated, and the interantennal area less declivous; the head is more finely and sparsely punctate; the elytra have much more numerous erect setae; and the tibiae are much stouter and more coarsely punctate.

Systates torticornis, sp. n.

♂ ♀. Black, moderately shiny, entirely devoid of scaling.

Head separated from the rostrum by an angulated furrow that is very shallow in the middle, set with strong obliquely confluent punctures and sparse pale setae; forehead broader than the dorsal area of the rostrum, with a shallow median sulcus; eyes moderately prominent. Rostrum of ♀ as long as broad, of ♂ distinctly longer, dilated at the genae; the dorsal area quite flat, with coarse shallow confluent punctuation, the margins obtusely angulate but not carinate, almost parallel, without any median carina; the declivous inter-antennal area shallowly concave and almost impunctate; the lateral areas shagreened, without any longitudinal carina. Antennae red-brown, with fine subrecumbent pubescence; scape abruptly clavate, with a strong double sinuation near the base, this part being compressed and dilated, with the dilation more marked in ♀, funicle with all the joints elongate and clavate, 1 a little longer than 2 + 3, which are equal, 4 shorter than 3 and equal to 5, 6 shorter than 5, 7 longer than 4. Prothorax nearly as long as broad in ♂, more transverse in ♀, rounded laterally, widest at the middle, truncate at base and apex, the latter being slightly the narrower; the dorsum convex longitudinally, highest far behind the middle, the base being lower than the apex, with minute recumbent setae. Elytra narrowly ovate in ♂, much broader in ♀, steeply declivous at the subtruncate base but without any angulate margin, the posterior declivity perpendicular near the apex in both sexes, the apex not produced downwards in ♀; the shallow striae containing rather large deep separated punctures; the intervals broad, slightly convex, shagreened, with very minute irregular recumbent setae. Legs black, with sparse yellowish setae; femora rugulose, without any long setae beneath in ♂; all the tibiae of ♂ with rather short sparse erect setae above and below, front tibiae only very slightly curved inwards at the apex, hind pair of ♂ moderately curved, flattened on the inner face and set with coarse irregular low rounded granules.

Length 8 mm., breadth 3-4 mm.

Alt. 5,200-5,600 ft., 2 ♂, 2 ♀, iv-vii, 1938.

The nearest ally is *S. loveni*, Aur., 1926, from Elgon and Lumbwa, which has the scape compressed at the base but without the S-like sinuation; it also differs in having a lateral stripe of whitish scales on the prothorax and elytra, and erect white setae on the elytral declivity.

Systates spp.

4 exx. of two different species.

Mitophorus largus, sp. n.

♂ ♀. Derm shining bronze, with very sparse narrow pale scales and long erect setae; underside with rather more numerous narrow scales, and a broad bare median stripe down the venter.

Head with a deep frontal sulcus and irregular variable deep punctures, sometimes striolate laterally in ♀; eyes moderately convex. Rostrum gradually narrowing from the base to the middle and dilated at the genae; the dorsal area flat (sometimes shallowly impressed in front), with a narrow median sulcus and variable large shallow punctures. Antennae very slender, red-brown, with sparse recumbent white setae; scape cylindrical in both sexes, abruptly clavate. Prothorax as long as broad, feebly rounded laterally, widest at a little beyond the middle, more narrowed behind than in front, the base being slightly narrower than the apex; the dorsum flat longitudinally, with large shallow punctures that are usually confluent transversely, set with rather long suberect white setae on the disk and sparse narrow scales laterally. Elytra ovate in ♂, globular in ♀, the dorsal outline of ♂ only moderately declivous at the base, the punctures in the rows deep and round; the intervals broad, shiny and impunctate, each with a row of very long distant erect white setae, the narrow scales sparsely and irregularly distributed, never forming definite stripes or rows of spots. Legs with sparse elongate pale scales; front tibiae quite straight on the external edge, the dorsal apical angle not produced into a sharp process in ♂, posterior tibiae of ♂ not curved inwards at the apex; the long erect white setae on the tibiae of ♂ rather sparse, not forming a dense fringe beneath, but more numerous on the dorsal edge, and present also in ♀.

Length 4.4-5.0 mm., breadth 2.0-2.7 mm.

KENYA COLONY: Chyulu Hills, 5,200-5,600 ft. 40 ♂, 44 ♀, iv-vii, 1938; Nairobi, 2 ♂, 2 ♀, x, 1920, 2 ♂, iii-iv, 1921 (A. F. J. Gedye), 1 ♂, 1 ♀, x, 1929 (G. A. K. Marshall); Kabete, 4 ♀, 1922 (H. E. Box); Chania Falls, Thika, 1 ♀, i, 1921 (Gedye).

Belongs to the group of *M. gravidus*, Gerst., 1884, and *M. pilosus*, Hust., 1921, which also bear long erect setae. They both differ in the following characters: the antennal scape is slightly compressed in the ♂ and distinctly so in the ♀; the elytra of the ♂ are very steeply declivous at the base; the front tibiae curve inwards at the apex (especially in the ♂) and their dorsal apical angle is produced into a sharp process over the tarsus in the ♂; the tibiae have no long erect setae on the dorsal edge; the elytra have a sublateral stripe of broad scales, and a similar stripe or row of spots on interval 3.

Subfamily BRACHYCERINAE.

Brachycerus suahilicus, Mshl.

1 ex., July, 5,600 ft. Recorded also from Naivasha, Tanganyika, Nyasaland, and N.W. Rhodesia.

Subfamily HIPPORRHININAE.

Hipporrhinus tenuegranulosus, Fairm.

2 ex., May, 5,600 ft. Distributed from Tanganyika to Abyssinia.

Subfamily TANYRRHYNCHINAE.

Stramia obscura, Aur.

4 ex., June, 5,600 ft. Previously known from only a single specimen from Kenya, without precise locality.

Subfamily CLEONINAE.

Lixus massaicus, Klb.

7 ex., May-July, 5,600-6,000 ft. Abundant in Uganda, Kenya and Tanganyika, ranging south to Nyasaland and S. Rhodesia.

Lixus kolbei, Fst.

1 ex., July, 5,600 ft. Also occurs in Nigeria, the Congo, and Uganda.

Lixus bisulcatus, Fst.

7 ex., April-July, 5,200-6,000 ft. Common in Uganda, Kenya, Tanganyika, Nyasaland, and S. Rhodesia.

Lixus sp.

1 ex., July, 5,600 ft.

L. (*Gasteroclytus*) *auricillatus*, Boh.

1 ex., April, 5,200 ft. Abyssinia to Natal, Uganda, Congo, Cameroons, and Senegal.

L. (*Gasteroclytus*) *avuncularius*, Klb.

2 ex., April, 5,600 ft. Kenya to S. Rhodesia.

L. (*Gasteroclytus*) *comparabilis*, Klb.

4 ex., June-July, 5,600 ft. Uganda, Kenya and Tanganyika.

Larinus sp.

1 ex., April, 3,800 ft.

Subfamily HYLOBIINAE.

Aparopionella cristata, sp. n. (Plate 1, fig. 4.)

♂ ♀. Derm black to piceous, normally hidden by a dense amorphous earthy indumentum, set with tufts of very broad erect scale-like setae, which are dark on the dorsum and pale laterally.

Head with the forehead nearly as broad as the base of the rostrum, flat, with the sculpture concealed and with a row of erect spatulate setae on each side; eyes convex, rather prominent. *Rostrum* a little shorter than the pronotum in both sexes, parallel-sided, but slightly wider at the apex, with three narrow straight dorsal carinae (the middle one finely divided on the apical half) which are normally hidden in ♂, and with numerous erect spatulate setae which are usually darker and stouter in ♂. *Antennae* slender, testaceous, with the club fuscous; scape with long erect setae on the apical half; funicle with the two basal joints subequal, 3-7 longer than broad, subequal. *Prothorax* as long as broad, gently rounded laterally, widest at the middle, the apex distinctly narrower than the arcuate base; the dorsum sloping gently forwards from near the base, with rugose reticulate punctation (concealed), without any carina or smooth median line; two irregular longitudinal rows of numerous stout erect dark clavate setae, a lateral row of pale ones, and a transverse row of similar setae along the apical margin. *Elytra* ovate, 1.5 times as long as broad, widest at the middle, sinuate at the base, obtusely acuminate at the apex; the deep close punctures in partly irregular duplicated rows (concealed); the true intervals very narrow and hardly wider than the intermediate ones; intervals 3, 5, 7 and the posterior half of 1 with a row of distant low elongate tubercles, each bearing a tuft of stout erect spatulate setae; intervals 3 and 5 slightly raised at the base, the scutellar area somewhat depressed. *Legs* clothed like the elytra and with numerous stout erect spatulate setae, the tarsi testaceous.

Length 4.0-4.5 mm., breadth 1.6-2.0 mm.

Alt., 5,600 ft., 4 ♂, 3 ♀, vi-vii, 1938.

Hustache (Mém. Mus. Nat. Paris, n.s. ix, 1939, p. 236) described *Aparopionella* as a subgenus of the palaearctic *Aparopion* for a minute species from Mt. Elgon, which I have not seen, giving as the only distinction that the ventral intercoxal process is only twice as wide as the space between the median coxae. But as the African species before me differ also in having the ventral process arcuate instead of truncate, ventrite 2 longer than 1 behind the coxa, the metasternum shorter than a median coxa, and the rostrum with a median sulcus beneath (whereas *Aparopion* has the basal ventrites equal, the metasternum as long as a median coxa, and no sulcus beneath the rostrum), I prefer to treat *Aparopionella* as a distinct genus.

Aparopionella echinata, sp.n.

♂ ♀. Derm shiny black, normally hidden by a dense amorphous incrustation.

Head with the forehead only about half as wide as the base of the rostrum, the eyes not prominent but level with the head. Rostrum as long as the pronotum in ♂, a little longer in ♀, with five carinae (concealed), the median one a little higher than the others and not divided anteriorly, set with numerous short broad spatulate erect pale setae. Antennae piceous, with the stem of the scape red-brown; scape with a few erect setae on the apical half; funicle as in *A. cristata* except that joint 1 is a little longer than 2. Prothorax as long as broad, moderately rounded laterally, widest at the middle, the apex only slightly narrower than the truncate base; the dorsum sloping anteriorly, highest behind the middle, with dense coarse deep punctures, the narrow intervals being somewhat uneven on the disk, without any definite carina or smooth median line; the sculpture entirely hidden by incrustation, with four multiple longitudinal rows of erect spatulate setae, and a transverse row of single erect setae across the front margin. Elytra ovate, 1.5 times as long as broad, widest at about the middle, truncate at the base, obtusely acuminate behind, with the normal ten rows of strong deep punctures; the intervals slightly narrower than the punctures, plane and shiny, all of even height (except that 3 is slightly raised at the base), without any tubercles; the alternate intervals with a row of isolated broad erect spatulate setae. Legs much more slender than in *A. cristata*, with thinner incrustation and much narrower erect setae; tarsi black, with only joint 4 and the claws testaceous.

Length 3.0-3.5 mm., breadth 1.5-1.7 mm.

Alt. 5,600 ft., 2 ♂, 2 ♀, vi-vii, 1938.

Length 3.2-3.6 mm., breadth 1.5-1.6 mm.

The genotype, *A. minuta*, Hust., is described as a very small red-brown species (under 2 mm.) entirely lacking the erect spatulate setae of the two species described above.

In the collection there are two additional species of this genus, but they are represented by single specimens only.

Subfamily ERIRRHININAE.

Smicronyx sopubiae, sp. n.

♂ ♀. Derm entirely black, with dense dark grey scales; elytra with a conspicuous quadrate whitish spot before the middle on interval 4 and a few irregular and variable whitish scales on the disk, mostly behind the middle.

Head with the eyes separated beneath by a space nearly as wide as the antennal club. Rostrum as long as the head and prothorax, strongly curved, gradually narrowed from base to apex in ♂, with longitudinally confluent rugulose punctures throughout, densely squamose and with stout curved setae, the

scales becoming much more sparse apically; rostrum of ♀ more abruptly subulate in the apical third and there bare, shiny, with sparse small punctures. *Antennae* black, with blackish setae; scape strongly but gradually clavate; the funicle rather stout, somewhat widening distally, with $1 = 2+3$, $3-7$ transverse. *Prothorax* as long as broad, feebly rounded laterally, slightly narrowed at the bisinuate base, much narrower and constricted at the apex, with narrow post-ocular lobes; the dorsum densely squamose, without any trace of a median carina. *Elytra* much wider at the roundly rectangular shoulders than the prothorax, shallowly trisinuate at the base, subtruncate at the apex, parallel-sided to the middle, with a deep subapical depression on each side and the posterior calli very prominent; the dorsal outline flat to the middle then gradually declivous, the striae deep and narrow (but often slightly sinuous), with elongate punctures; intervals with very dense scaling and a row of broad scale-like appressed setae. Legs stout, entirely black, with dense dark scaling and stout curved setae; femora with a stout tooth; tibiae deeply bisinuate on the lower edge, with a sharp angulation above the middle. *Underside* with the mesosternal process subtuberculate; ventrite 1 behind the coxae a little shorter than 2, which is longer than 3+4.

Length 4.5 mm., breadth 2.0 mm.

Alt. 6,000 ft., 1 ♂, 3 ♀, bred from galls on roots of *Sopubia* sp. (Scrophulariaceae), v, 1938; alt. 5,600 ft., 19 ♂, 25 ♀, vi-vii, 1938.

Most nearly allied to *S. quadrituberculatus*, Hust., 1936, from the French Congo, but the latter species, which is smaller, has the elytra very differently coloured, the antennae and tarsi are ferruginous, and the elytra have an additional small tubercle at the apex of interval 3.

Smicronyx maerens, sp. n.

♂. Derm entirely black, with dense dark grey scaling and a few sparse appressed scale-like whitish setae.

Head with the eyes practically contiguous beneath. Rostrum longer than the head and prothorax (11:8), only slightly curved, not narrowed apically, with longitudinally confluent rugulose punctuation throughout, which is normally entirely hidden by the dense scaling, and stout curved black setae. *Antennae* black, with broad whitish setae; scape rather slender, gradually clavate only near the apex; funicle with joint 1 a little longer than $2+3$, 3 and 4 as long as broad, the rest transverse and widening distally. *Prothorax* as long as broad, rounded laterally, widest behind the middle, much narrower and constricted into a collar at the apex, the postocular lobes distinct, the base shallowly

bisinuate. *Elytra* much wider at the roundly rectangular shoulders than the prothorax and parallel-sided from there to the middle, feebly trisinuate at the base, jointly rounded at the apex, with only shallow subapical impressions and without any posterior calli; the dorsal outline distinctly convex, highest well in front of the middle, the fine striae indistinctly punctate and quite straight, the intervals with dense scaling and a row of scale-like appressed setae, a few of which are whitish. *Legs* entirely black, with dense grey scaling; femora thick, with a stout tooth; tibiae shallowly bisinuate on the lower edge with a small obtuse projection at one-third from the base. *Underside* as in *S. sopubiae*, sp. n.

Length 3.6 mm., *breadth* 1.8 mm.

Alt. 5,600, 5 ♂, vi, vii, 1938.

Distinguished *inter alia* from the preceding species by its smaller size; the longer, straighter, non-subulate rostrum; and the absence of posterior calli on the elytra.

Smicronyx sp.

1 ex., June, 5,600 ft.

Derelomus abyssinicus, Hust.

2 ex., June, 5,600 ft. Previously known only from Abyssinia.

Subfamily APIONINAE.

Apion stichochaetis, sp. n.

♂ ♀. Rather dull black (the apical margin of the elytra reddish in ♂), with grey setae above, which are sparse and evenly distributed on the pronotum, and on the elytra are arranged in a perfectly straight single row on each interval; underside with sparse whitish setae, without denser lateral patches; legs pale yellow (including trochanters), the tarsi rather darker, and the apices of the femora, tibiae and the two basal joints of the tarsi, narrowly blackish.

Head transverse, shagreened, the forehead with two rows of setae on each side, the eyes moderately convex; a long fringe of white setae beneath the eyes in ♂. *Rostrum* of ♂ as long as the head and pronotum, curved, very gradually narrowing from base to apex, finely rugulose and clothed with appressed longitudinal setae right to the apex, rostrum of ♀ a little longer, more slender, much more strongly curved, slightly narrowed near the base and parallel-sided from there to the apex, finely shagreened, with only a few setae at the base. *Antennae* piceous, with the basal two-thirds of the scape yellow, inserted nearer to the base than the length of the scape, which is nearly as long as the first three joints of the funicle; joint 1 of the funicle nearly as long as 2+3, the distal joints moniliform. *Prothorax* a little broader

than long, the sides rounded in the middle, constricted in front and behind, widest at the base, with the basal angles projecting acutely; the dorsum convex longitudinally, highest a little in front of the middle, shagreened, with a transverse depression close to the base and a round fovea in the middle of it. *Scutellum* round, shallowly impressed, bare. *Elytra* narrowly ovate, obtusely rounded at the shoulders, with the sides gently rounded, widest at the middle, the humeral callus distinct but obtuse; the striae deep, broad and sharply defined, with deep quadrate punctures containing a short pale seta, striae 1 and 2 not deeper at the apex; the intervals not wider than the striae, flat, finely rugulose, each with a perfectly straight single row of long overlapping recumbent setae. *Legs* slender, the hind femora not nearly reaching the apex of the elytra, without sexual differences.

Length 1.5-1.7 mm., *breadth* 0.7 mm.

KENYA COLONY: Chyulu Hills, 5,200-5,600 ft., 6 ♀, iv, vi, vii, 1938 (type); Nairobi, 2 ♂, 2 ♀, x 1920 (A. F. J. Gedye).

Nearly allied to *A. marshalli*, Wagn., 1908, from Natal, which differs in having the basal angles of the prothorax much less produced; in the ♂ the apical fourth of the rostrum is bare and shiny, the posterior pairs of tibiae have an apical spine, and the apical margin of the elytra is black; in the ♀ the rostrum is much less strongly curved and very shiny throughout, and the posterior pairs of femora are blackish.

Apion rudiostre, sp. n.

♂ ♀. Black to piceous, not very shiny, rather thinly but evenly covered with short narrow white scales, which form a denser triangular spot at the base of interval 3 on the elytra; underside with similar scaling and without denser lateral patches; legs dark piceous.

Head distinctly transverse (2:3), rugosely punctate, with a shallow median stria; eyes moderately prominent, with a fringe of white scales along their lower edge, especially in ♂. Rostrum of ♂ curved, almost as long as the head and pronotum, slightly widened above the antennae, rugosely punctate throughout and with sparse subrecumbent narrow white scales almost to the apex, a row of short erect white setae laterally, and on the underside two fairly dense rows of similar erect setae; rostrum of ♀ a little longer than the head and pronotum, with quite similar sculpture, but the supra-antennal dilatation less marked, the scales less conspicuous owing to their being much narrower (almost setiform), and the erect setae on the lower surface less numerous. Antennae piceous, inserted at one-third from the base of the rostrum, the space between them and the eye being

longer than the scape, which is nearly as long as the first three funicular joints; joint 1 of the funicle as long as 2+3, 3-6 slightly longer than broad, 7 transverse. *Prothorax* nearly as long as broad, gently rounded laterally, without constrictions, broadest behind the middle, the basal angles not projecting; the dorsum convex longitudinally, highest in the middle, shagreened, with very shallow large punctures, and a short deep median stria at the base. *Scutellum* almost round, bare, flattened or depressed in the middle. *Elytra* ovate, obtusely rounded at the shoulders, gently rounded laterally, widest at the middle, the humeral callus distinct, the dorsal outline moderately convex, highest before the middle, the deep striae with round separated punctures containing a stout white seta, striae 1 and 2 not deeper at the apex; the intervals flat, broader than the striae, rugulose, each with two irregular rows of narrow white scales. *Legs* short, the hind femora not reaching the apex of the elytra; no sexual dimorphism.

Length 2.0-2.3 mm., breadth 1.0-1.1 mm.

Alt. 5,600 ft., 3 ♂, 4 ♀, vi-vii, 1938.

Allied to *A. congolanum*, Hust, 1922, which differs in having the rostrum smoothly punctate, without any rows of erect setae at the sides and beneath; the prothorax is distinctly constricted at the apex; the clothing consists of setae and not scales, and there is only a single row of setae on interval 1 of the elytra.

Apion considerandum, Fhs.

1 ex., April, 5,200 ft. Abyssinia to Natal.

Apion spadiceum, Wagn.

1 ex., June, 5,600 ft. Natal to Eritrea and Arabia.

Apion africanum, Gyll.

9 ex., April-July, 5,200-5,600 ft. Kenya to Natal and Angola.

Apion fortirostre, Wagn.

2 ex., April, June, 5,600 ft. Natal to Abyssinia, Sierra Leone.

Apion hemisphaericum, Wagn.

1 ex., June, 5,600 ft. Transvaal.

Apion tenuicorne, Wagn.

1 ex., July, 5,600 ft. S. Rhodesia.

Apion bomaense, Fst.

3 ex., June-July, 5,600 ft. Belgian Congo and Arabia.

Apion abimva, Burg.

14 ex., June-July, 5,600 ft. Recently described from the Congo.

Apion flexuosum, Wagn.

1 ex., May, 5,400 ft. Uganda, S. Rhodesia, Portuguese E. Africa.

Apion familiare, Fst.

32 ex., April-July, 5,600-6,000 ft. Kenya to Natal.

Apion spp.

9 ex., representing six different species.

Piezotrichelus kenyae, Hust.

1 ex., June, 5,600 ft. Mt. Kenya, the Aberdare Mts. and Amboni R.

Piezotrichelus varius, Wagn.

1 ex., April, 5,600 ft. Tropical Africa to Natal.

Piezotrichelus magnirostris, Wagn.

8 ex., June-July, 5,600 ft. S. Rhodesia.

Piezotrichelus residuus, Wagn.

3 ex., June, 5,600 ft. S. Rhodesia.

Piezotrichelus spp.

13 ex., representing five different species.

Subfamily NANOPHYINAE.

Ctenomerus hoplocnemis, sp. n. (Plate 1, fig. 5.)

♂ ♀. Piceous, with fairly dense setiform scaling; prothorax ochraceous to pale yellow, sometimes with an ill-defined whitish patch laterally; elytra with mingled grey and pale brown scales, a large common subtriangular dark patch near but not reaching the base with its apex directed backwards, and with a very indefinite and variable row of small darker spots on intervals 1, 3, and 5.

Rostrum of ♂ three-fourths to four-fifths the length of the elytra, curved, 5-carinate throughout, with the antennae inserted at one-third from the apex; that of ♀ rather more slender and longer than the elytra, the carinae less distinct beyond the antennae, which are inserted at the middle; scrobes continued almost to the apex in both sexes. *Antennae* honey-coloured, with the apices of the funicular joints darker, the club dark with the apical half of the last joint paler; funicle about as long as (♂) or longer than the club, joint 1 longer than 2, the distal joints all a little longer than broad, 5 normal and not asymmetrical. *Prothorax* a little longer than half the basal width, subconical, with the sides almost straight; the long dense setiform scales almost concealing the derm and forming a transverse row of three conical tufts at the middle, the median one being smaller. *Elytra* ovate, separately rounded at the apex, with a broad transverse depression just behind the elevated basal margin, the shoulders with a low obtuse callus; the deep striae containing large oblong punctures which are partly concealed by scaling; intervals 1, 3, 5 very slightly more raised, 3 with a feeble callus near the base bearing a dense tuft of sub-

erect dark brown hair-scales, and a smaller tuft on the suture at the apex of the dark basal triangular patch, interval 8 with a finely granulate carina from the base to beyond the middle; the setiform scaling fairly dense but not entirely concealing the derm. Legs piceous, very stout, with fairly dense yellowish setiform scales and a very indefinite paler patch beyond the middle of the tibiae; the front femors with four teeth, the posterior pairs with three, but the middle pair sometimes with a minute additional tooth; tibiae unusually broad, with the upper angle of the corbel produced into a stout sharp tooth, that on the front pair being longer than the others, the front pair with a very deep basal sinuation on the lower edge, the other pairs more shallowly bisinuate.

Length 3.4-4.5 mm., breadth 2.0-2.6 mm.

Alt. 5,600 ft., 3 ♂, 1 ♀, vi-vii, 1938.

Readily distinguished from the previously described species by the subapical tooth on the tibiae and the four (instead of three) teeth on the front femora.

Nanophyes sp.

1 ex., June, 5,600 ft.

Subfamily ANTHONOMINAE.

Thamnobius scutellaris, sp. n.

♂ ♀. Derm testaceous brown, the elytra with the following markings which are usually blackish but vary from that to light brown, being sometimes obsolescent: a large common subquadrate basal patch extending laterally to stria 4, and a posterior lateral patch on the declivity which often extends over the whole lateral area to the base; pronotum with rather sparse whitish scales; elytra with sparse setiform scales which are yellowish on the paler areas and dark on the darker ones, and with a conspicuous short stripe of dense white scales at the base of the suture including the scutellum; underside with rather sparse whitish scales and dense broader white scales at the sides of the sternum.

Head with indistinct punctures and sparse recumbent setiform scales; forehead about two-thirds the width of an eye, with fairly dense suberect setiform scales; eyes convex and slightly prominent. Rostrum of ♂ much shorter than the pronotum (2:3), slightly curved, closely punctate and densely squamose on the basal three-fourths, the apical area smooth, with sparse minute punctures; rostrum of ♀ longer, but still shorter than the pronotum; the smooth apical area longer. Antennae testaceous, the funicle with joint 1 as long as 2+3, the rest slightly transverse and closely contiguous. Prothorax somewhat transverse, moderately rounded laterally, widest far behind the

middle, shallowly constricted at the apex, which is much narrower than the bisinuate base; the dorsum rather strongly convex longitudinally, highest behind the middle, declivous in front, with dense even shallow punctuation; the scales comparatively broad, short and oval on the posterior third, but narrow and elongate on the anterior part. *Elytra* broadly ovate (11:9), parallel-sided from the prominent shoulders to one-third from the jointly trisinuate base, with no posterior calli; the dorsum sloping posteriorly from before the middle, the striae broad and deep, with large close punctures; the intervals not or but little wider than the striae, rather thinly clothed with setiform scales, those on the basal sutural stripe shorter, broader and much denser. *Legs* testaceous brown, with sparse white setiform scales; femora with a small sharp tooth.

Length 1.7-2.0 mm., *breadth* 1.0-1.1 mm.

Alt. 5,600 ft., 5 ♂, 6 ♀, vi, vii, 1938.

Of the genus *Thamnobia* five species have been described from the Cape Province, South Africa, three from the Belgian Congo, and one from southern Abyssinia; I have numerous undescribed species from S. Rhodesia, but hitherto no other has been recorded from East Africa. The present species can be readily distinguished by its white scutellar marking.

Endaeus sublucidus, sp. n.

♂ ♀. Uniformly testaceous and rather shiny, the derm not concealed by the pubescence.

Head not constricted behind the eyes, which are strongly convex but not prominent; forehead about half as wide as the base of the rostrum, finely rugulose, with a narrow indistinct median carina and sparse suberect pubescence. *Rostrum* as long as the pronotum in ♀, a little shorter in ♂, finely tricarinate in the basal half. *Antennae* inserted at about the apical third of the rostrum in ♀ and at the apical fourth in ♂; funicle with joint 1 as long as 2+3, 4-6 slightly transverse, scarcely widening distally. *Prothorax transverse* (5:6), strongly rounded laterally, widest a little behind the middle, more narrowed in front but not constricted at the apex, arcuate at the base; the dorsum with fairly close strong pubescence, without any smooth median line. *Elytra* ovate, 1.5 times as wide at the shoulders as the prothorax, gently rounded laterally, widest at the middle, rather broadly rounded behind with the apices separated, without any trace of posterior calli, the suture slightly flattened for a short distance at the base; the punctures in the striae fine and close, scarcely diminishing behind, striae 1 and 2 deeper on the declivity; the intervals much broader than the striae, flat, impunctate, with very short sparse recumbent pubescence and each with a row of short suberect setae, without any granules. *Legs* with the front

femora armed with a long sharp tooth, much longer than that on the posterior pairs, and with the usual fringe of setae beyond it; front tibiae only slightly and gradually widening distally, very shallowly sinuate beneath at the base, without any carina or tooth on the lower edge.

Length 2.7-3.0 m.m., breadth 1.4-1.5 mm.

KENYA COLONY: Chyulu Hills, 5,600 ft., 5 ♂, 2 ♀, iv, vi, vii, 1938 (type); Chania Falls, Thika, 1 ♂, i, 1921 (A. F. J. Gedye).

The nearest ally of the species would appear to be *E. lucens*, Hust., 1937, from the Belgian Congo, which however is described as having the prothorax constricted at the apex, very finely and obsoletely punctate, with large shallow sparse punctures and a raised median line; the front tibiae are also dilated in the middle on the lower edge.

Subfamily ALCIDODINAE.

Alcidodes orientalis, Chev.

1 ex., June, 5,600 ft. Common in Uganda, Kenya, and Tanganyika.

Alcidodes haemopterus, Boh.

5 ex., April-July, 5,600 ft. Abundant throughout Africa, being very variable in size and colour.

Alcidodes amitinus, Klb.

1 ex., June, 5,600 ft. Tanganyika and Portuguese E. Africa.

Alcidodes albolineatus, Boh.

1 ex., June, 5,600 ft. Tropical Africa to Natal.

Alcidodes obsoletus, Gerst.

1 ex., April, 5,200 ft. From Kenya to the Transvaal.

Alcidodes cylindricus, Klb.

1 ex., July, 5,600 ft. Cameroons, Uganda, and southwards to S. Rhodesia.

Alcidodes deermius, Klb.

1 ex., June, 5,600 ft. Hitherto known only from Tanganyika.

It is with regret that I have had to change the name of this very large and well-known genus (Ann. Mag. N.H. (ii) iii, p. 582), but Mr. Tams informs me that the earlier *Alcides*, Hübn., is still in use in the Lepidoptera.

Subfamily ITHYPORINAE.

Endeochetus turneri, sp. n. (Plate 1, fig. 6.)

♂ ♀. Derm black to piceous, opaque; head and prothorax with only sparse recumbent yellowish setiform scaling and a small lateral spot in the middle composed of a few broader scales; elytra with fairly dense scaling, the ground-colour being pale yellowish brown with very variable indefinite patches of

dark brown (or *vice versa*) and the following pale yellowish markings: a subquadrate humeral patch from stria 3 to 6, often interrupted on interval 5 and extending furthest backward on interval 4; a common transverse oval sutural patch a little behind the middle, extending laterally to stria 2, strongly arcuate anteriorly and subtruncate posteriorly, rarely extending laterally as a very indefinite narrow band to stria 6 owing to the scales in the ground-colour becoming paler, and adjoined behind (and sometimes in front) by an ill-defined dark brown patch; and finally a pale spot at the apex of interval 5, which is rarely obsolete; underside with sparse yellowish setiform scales.

Head very closely and strongly punctate, with a very shallow impression in the middle of the forehead. *Rostrum* curved, comparatively short and stout, only as long as the prothorax, a little stouter and parallel-sided in ♂, more slender and slightly dilated at the apex in ♀, strongly and closely punctate in the basal half with a narrow smooth median line. *Antennae* inserted beyond the middle in both sexes, but a little nearer to the apex in ♂, piceous; funicle with the two basal joints subequal, 3 longer than 4 and both longer than broad, 5-7 globular and widening progressively. *Prothorax* as long as broad, strongly and regularly rounded laterally, widest at the middle, feebly constricted at the apex, scarcely wider at the base, which is truncate with its angles very obtuse; the dorsum strongly convex longitudinally, highest at the middle, opaque, with rugose confluent punctuation, the narrow intervals uniting more or less to form very sinuous carinulae, with a strong narrow smooth carina from the apex to behind the middle; the punctures filled with a dark indumentum, and containing an elongate recumbent setiform scale, there being a few broader scales laterally and on the posterior fourth of the median line. *Scutellum* very small, bearing a few scales. *Elytra* ovate, with the obtusely rounded basal angles projecting laterally well beyond the base of the prothorax, very gradually widening from the basal angles to the middle, obtusely acuminate behind; the rather broad deep striae containing large round separated punctures which are partly concealed by scaling and contain a short recumbent seta; the intervals costate (except 1, which is flat) with a row of numerous round shiny granules, each bearing a short stout recumbent seta, 3 and 5 rather more elevated basally, 4 and 6 flat and without granules at the base where they are covered by the pale humeral patch. *Legs* shorter than in the genotype, piceous, with sparse recumbent pale setiform scales and an indefinite whitish patch beyond the middle on the hind tibiae; femora with a short sharp tooth, the hind pair only reaching the apex of the elytra; tibiae deeply bisinuate beneath, with

a strong obtuse projection above the middle, the apical fringe of setae black.

Length 6.0-7.5 mm., breadth 2.5-3.1 mm.

Alt. 5,600 ft., 10 ♂, 4 ♀, vi-vii, 1938.

The genotype, *E. elegans*, Fairm. (=*jucundus*, Klb.), from Tanganyika, differs in having a much longer and more slender rostrum, which is longer than the prothorax, especially in the female (11:8); the distal joints of the funicle are longer than broad; the legs are much longer, the hind pair extending well beyond the elytra and bear two conspicuous white patches; and the elytra have a broad sharply-defined transverse fawn-coloured band, which has its front margin very deeply bisinuate and its hind margin concave.

Named after Mr. Allen Turner who assisted in the Expedition and has also collected a large number of interesting Coleoptera in other parts of Kenya.

[It seems desirable to describe here another allied species of *Endeochetus* that also occurs in Kenya.

Endeochetus levicollis, sp. n.

♂ ♀. Derm black, shiny; head and prothorax almost bare; elytra with dense mottled dark and light brown scaling and the following pale yellowish marking: a quadrate humeral patch from stria 3 to 6, which becomes rather indefinite behind; and a broad common undulating band behind the middle extending to stria 7, its anterior margin being quadrisinuate (projecting furthest forward on the suture) and its hind margin trisinuate.

Head with strong separated punctures and a shallow frontal fovea, without any obvious scales or setae. Rostrum curved, stout, slightly shorter than the pronotum, parallel-sided in ♂, very slightly narrower and more dilated at the apex in ♀, with six irregular rows of strong punctures (the external ones sulcate) on the basal half, four of which continue finely to the apex; all the punctures much finer in ♀. Antennae as in the preceding species. Prothorax globular, nearly as long as broad, very strongly and regularly rounded laterally, widest at the middle, feebly constricted at the apex which is somewhat narrower than the base, the basal angles entirely rounded off; the dorsum strongly convex longitudinally, highest behind the middle, closely set with large but not confluent punctures and with a smooth (not carinate) median line which reaches neither base nor apex, the intervals between the punctures smooth and shiny; the setae in the punctures on the disk very short and inconspicuous, becoming scale-like laterally. Scutellum very small, with a few scales. Elytra of the same shape as in *E. turneri*; the striae narrow, mostly bare, with small separated punctures; the

intervals broad, convex but not costate, all of equal height, with a row of small flattened granules which almost disappear behind the middle, each bearing an appressed scale-like yellow seta. Legs short and stout, rugosely punctate, with patches of broad yellow scales on the hind femora just before the clavate part, dorsally near the apex, and on and round the tooth, and a dorsal patch on the hind tibiae beyond the middle; femora with a stout tooth, the hind pair not nearly reaching the apex of the elytra; tibiae as in *E. turneri* but rather shorter and stouter, and the apical fringe of setae red.

Length 5.5-6.5 mm., breadth 2.2-3.0 mm.

KENYA COLONY: Ngong, 1 ♂, 2 ♀, iv-vii, 1934 (Dr. V. G. L. van Someren).

Readily distinguished from the other species by its smooth shiny thorax.]

Ichniochetus stigma, Klb.

2 ex., April, June, 5,600 ft. A rare species, hitherto known only from Usambara.

Subfamily CRYPTORRHYNCHINAE.

Mecistocerus granifer, sp. n.

♀. Derm dull black, with dense dark brown scaling variegated with pale brown markings.

Head with rugose reticulate punctation and fairly dense ochreous brown scaling, the forehead with a low flattened median carina. Rostrum tricarinate on the basal third. Antennae inserted at a little behind the middle of the rostrum, honey-brown; funicle entirely devoid of pubescence, joints 1 and 2 equal, 3-5 longer than broad (4 the longest), 6 and 7 as long as broad, subequal. Prothorax slightly transverse, gently rounded laterally in the basal half, more rapidly narrowed in front and constricted at the apex, widest at about the middle, feebly bisinuate at the base; the dorsum slightly convex longitudinally, highest near the base, with a shallow transverse depression near the apex and set with large deep reticulate punctures and a narrow sinuous median carina from the apex to three-fourths; each puncture with a suberect stout spatulate seta, but the narrow intervals without scaling except for an ochreous patch on each side of the apex and a small ochreous spot in the middle of the pleurae. Scutellum convex, bare, shiny. Elytra much wider at the shoulders than the base of the prothorax, parallel-sided from there to beyond the middle, with obtuse posterior calli and a broad transverse impression on the disk at one-fourth from the base; the shallow striae with large deep subquadrate punctures which diminish behind; the intervals of equal height,

a little wider than the punctures, rugulose, each with a continuous row of small granules bearing a suberect scale-like seta. Legs with the scaling dark brown on the basal half of the femora turning to ochreous apically, the tooth small on the anterior pairs, much larger and triangular on the hind pair; tibiae unicolorous brown, not narrowing from the middle to the apex, almost straight on the lower edge, with the external apical angle rounded.

Length 5.5-7.5 mm., breadth 2.5-3.5 mm.

Alt. 5,200-5,600 ft., 3 ♀, iv, vi, vii, 1938.

This species may be distinguished from its congeners by the continuous rows of granules on the elytra and the subcarinate forehead.

Mecistocerus sp.

1 ex., June, 5,600 ft.

Isoramphus acalloides, Hust.

43 ex., June-July, 5,600 ft. Known only from the forest zone on Kilimanjaro, 6,000-8,700 ft.

Subfamily CEUTHORRHYNCHINAE.

Paroxyonyx humeridens, Hust.

50 ex., June-July, 5,600 ft. Quite recently described from Kitale, Uasin Gishu, 7,000 ft.

Micrelus cruciatus, Schultze.

16 ex., June-July, 5,600 ft. Originally described from Usambara.

Micrelus sp.

1 ex., July, 5,600 ft.

Subfamily MENEMACHINAE.

Anamelus, gen. nov.

Head with the eyes narrowly separated. Rostrum with the scrobes not continued beyond the antennae. Antennae with the funicle not widening distally, the first joint of the club shorter than the rest together. Elytra oblong-ovate, covering the pygidium, wider than the prothorax, with stria 1 reaching the base, which is jointly trisinuate. Legs with all the femora bearing a sharp triangular tooth, the front pair only moderately larger than the hind pair; front tibiae curved in the basal third, then straight to the apex, narrowing from the middle to the apex, without any long erect setae on the lower edge, the mucro obsolescent. Sternum with the anterior part of the prosternum only half as long as the coxae, which are narrowly separated, the posterior part produced in the middle and emarginate;

mesepimera produced upwards but not visible from above; metasternum a little longer than ventrite 1 behind the coxa, the episterna parallel-sided. *Venter* with ventrite 2 as long as 3+4 in the middle.

Genotype: *Anamelus punctum*, sp.n.

Allied to *Menemachus*, Schönh., which differs *inter alia* in having the anterior tibiae parallel-sided dorso-ventrally and strongly curved throughout, with a row of long erect setae on the lower edge, and the longitudinal mucro strongly developed, being nearly as long as the uncus; the front femora are much larger than the posterior pairs, with a very large tooth, beyond which is a pair of erect setae.

Anamelus punctum, sp. n.

♂ ♀. Black, with fairly dense overlapping narrow scales which partly conceal the derm; head with a median whitish spot just behind the eyes; pronotum with an indefinite macular sub-lateral whitish stripe (which may be reduced to a spot at the apex and the base), and a faint pale transverse discal band behind the middle; elytra with variable mixed dark brown and fulvous scales and sometimes a few whitish ones, an ill-defined transverse fulvous patch at the base between stria 2 and the shoulder, and a conspicuous white spot on the suture behind the middle confined to interval 1; underside with uniform sparse narrow grey scales.

Head with the eyes separated by a space as wide as the distal joints of the funicle. *Rostrum* a little shorter than the pronotum in both sexes, with very rugose punctuation and a fine median carina in ♂, much more finely punctate and tricarinate at the base in ♀. *Antennae* with joint 1 of the funicle longer than 2, the distal joints moniliform. *Prothorax* slightly transverse (7:8), almost parallel-sided from the base to beyond the middle, narrowed but not constricted at the apex, which is more than half as wide as the bisinuate base (5:8), the basal angles rounded; the dorsum with dense fine punctuation, partly hidden by scaling, and a fine smooth median line. *Scutellum* with whitish scales. *Elytra* suboblong, broadly rounded behind, shallowly impressed round the scutellum, with a broad transverse subapical depression, the narrow deep striae indistinctly punctate, the flat intervals densely and finely punctate. *Legs* black, with the tarsi ferruginous to piceous, with rather sparse setiform grey scales; hind tibiae almost straight on the lower edge and shallowly sinuate dorsally.

Length 2.7-3.0 mm., breadth 1.1.-1.2 mm.

Alt. 5,600 ft., 3 ♂, 2 ♀, vi-vii, 1938.

Menemachus sp.

1 ex., June, 5,600 ft.

Elattocerus sp.

1 ex., June, 5,600 ft.

One specimen was also found of which the genus is uncertain.

Subfamily BARIDINAE.

Chelonebarus, gen. nov.

Rostrum separated from the globular head by a deep basal depression, laterally compressed at the base, scarcely narrowed dorso-ventrally at the apex; mandibles bidentate. *Antennae* inserted beyond the middle of the rostrum in both sexes; scape nearly as long as the funicle, reaching the eye; funicle not widened distally, joint 7 distinct from the club; the basal joint of the club shorter than the rest together. *Prothorax* strongly transverse, deeply bisinuate at the base. *Elytra* unusually broad and subquadrate, much wider at the prominent shoulders than the base of the prothorax, highest close to the base and sloping from there rather steeply backwards, very broadly rounded behind, with large obtuse subapical calli and deep narrow striae. *Legs* with the femora slightly clavate and unarmed, the hind pair reaching the apex of ventrite 4; tibiae sharply bent at the base, thence almost parallel-sided to the apex, shallowly sulcate, with a small uncus and a minute mucro; tarsi with joint 3 broadly bilobate, 1 almost bare beneath, 2 pubescent only on the apical half, and 3 bare at the base, the claws very small and closely approximated. *Sternum* with the prosternal margin deeply sinuate and without any fringe of setae; the anterior portion of the prosternum unusually short, only slightly longer than the postcoxal part, the margin of which is broadly truncate in the middle, the intercoxal process as wide as a coxa; mesosternum very short, deeply depressed, the intercoxal process nearly twice as wide as a coxa, vertical and fused with the metasternum, which between the coxae is about as long as a mesocoxa. *Venter* with the intercoxal process very broad, nearly twice as broad as a coxa, gently arcuate; ventrite 1 behind the coxa as long as the metasternum between the coxae, and a little longer than 2, the suture between them distinct; pygidium entirely covered by the elytra.

Genotype: *Chelonebarus partimpunctatus*, sp.n.

The species upon which this genus is based has a very distinct facies, as compared with known African Barids, owing to the unusually short and broad elytra, with their steep backward slope from near the base; the shortness of the prosternum in

front of the coxae is also quite exceptional; and the short metasternum and long scape are characteristic; the punctuation of the elytra is quite abnormal.

Chelonebarus partimpunctatus, sp. n.

♂ ♀. Testaceous brown, without scaling, the elytra, legs and antennae rather paler.

Head with very shallow close punctures. *Rostrum* of ♂ longer than the pronotum (9:7), gently curved, closely and strongly punctate almost to the apex, with five narrow indefinite carinae; rostrum of ♀ a little longer (10:9) and narrower, coarsely punctate only at the base, elsewhere shiny and finely punctate, without carinae. *Antennae* with joint 1 of the funicle longer than 2, 3 longer than broad, the rest transverse and sub-equal. *Prothorax* transverse (2:3), widest at the base, narrowing with a slight curve to the apex, with a subapical constriction which is continued rather deeply across the dorsum, the basal angles rounded; the dorsum strongly convex longitudinally, sloping steeply in front, highest behind the middle, closely set with strong punctures, leaving only a narrow irregular smooth median line. *Scutellum* small, rounded, bare, with a median depression. *Elytra* only a little longer than broad, much broader at the prominent shoulders than the base of the prothorax (8:5), almost parallel-sided from there to the middle and broadly rounded behind, strongly convex transversely especially near the base, with distinct obtuse subapical calli; the striae narrow and deep, with small indistinct distant punctures, except in the basal third of striae 1 and 2 where the punctures are large and close, stria 7 reaching the base within the humeral callus; the intervals broad and flat, shagreened, with a row of almost obliterated punctures, except on the basal third of intervals 1-2 where the punctures are large and dense, being of about the same size as those in the adjoining striae, and on the basal fifth of interval 3 where there are strong duplicated punctures; interval 9 subcostate. *Legs* with coarse punctures, each containing a short pale seta. *Underside* strongly punctate, with sparse pale setae.

Length 3 mm., breadth 1.8 mm.

Alt. 5,600 ft., 1 ♂, 1 ♀, vi, 1938.

Baris aeneipennis, Hust.

9 ex., June-July, 5,600 ft. Only known previously from Kijabe, Kenya, 7,000 ft.

Baris naivashensis, Hust.

1 ex., July, 5,600 ft. Known from Naivasha and from Unyoro, W. Uganda.

Baris massaica, Aur.

3 ex., July, 5,600-6,600 ft. Recorded from Bura and Voi in Kenya, and from Kilimanjaro and Beira.

Baris spp.

3 ex. representing three different species.

Subfamily CALANDRINAE.

Calandra oryzae, L.

8 ex., April-July, 3,800-5,600 ft.

Subfamily COSSONINAE.

Cossonus fossatirostris, sp. n.

♂ ♀. Red-brown to piceous, moderately shiny.

Head with small dense punctures, the forehead with a shallow median sulcus (continuous with that on the rostrum) and a deep fovea; eyes moderately convex. Rostrum similar in the two sexes, much longer than broad, narrowing from the base to the middle and very broadly dilated at the apex, the dilatation being subtriangular and not subquadrate; the dorsal area with a broad shallow sulcus which is usually more sparsely punctate than the raised sides, the broad apical area quite flat transversely and with small separated punctures. Antennae with the red-brown scape longer than the black funicle (5:4); joint 1 of the funicle much longer than 2. Prothorax as long as broad, moderately rounded laterally, widest at the middle, and with a rather deep narrow subapical constriction; the dorsum gently convex longitudinally, fairly evenly set with small separated punctures of approximately the same size, with a smooth median line which is often indefinite in front, widens a little in the middle and becomes carinate near the base, there being on each side of the carina a coarsely punctate elongate depression which extends from the base to less than one-third. Elytra only very slightly wider than the widest part of the prothorax, the deep striae with strong close punctures which become much smaller behind, stria 1 curving outwards at the base; the intervals not wider than the striae, slightly convex, with an irregular row of very fine punctures, interval 1 quite flat and narrowing at the base into a fine carina, 9 forming a low broad costa at the apex. Underside: the distances between the three pairs of coxae in the ratio of 3:4:5.

Length 4.3-6.5 mm., breadth 1.1-2.0 mm.

KENYA COLONY: Chyulu Hills, 5,600 ft., 11 ex., vi, 1938 (type); Chania R., 7,800 ft., 1 ex., vii, 1929 (R. E. Dent).

Belongs to the group of *C. carinicollis*, Fhs., 1871, which also includes *procerus*, Gerst., 1871, *fraudiger*, Fst., 1895, and *fraudulentus*, Klb., 1898; but all these species differ in having no sulcus on the rostrum, which in the first two bears a median carina. *C. fraudulentus* also differs in having the front femora obtusely subdentate.

Cossonus gracilirostris, sp. n.

♂ ♀. Shining black, the tarsi and the narrow part of the scape testaceous, the funicle red-brown.

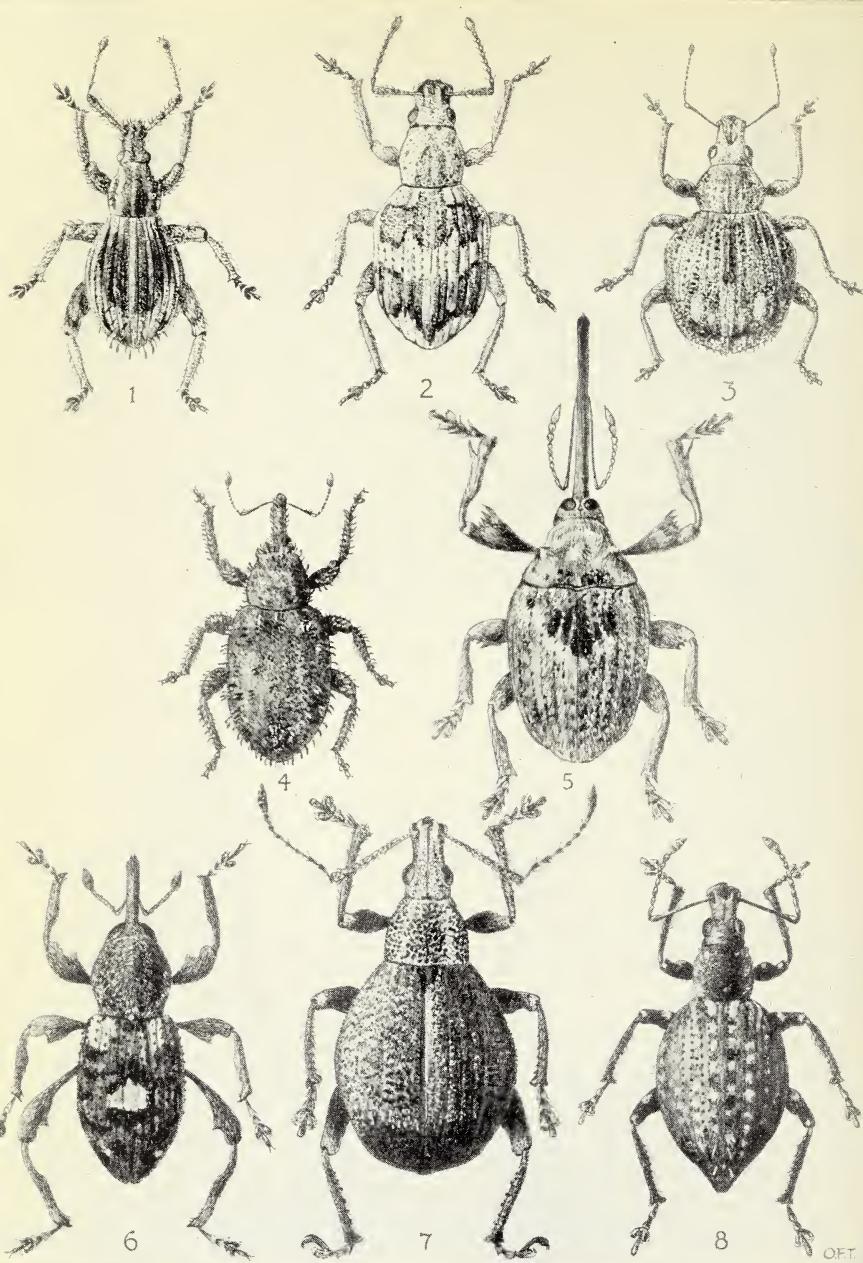
Head conical (the eyes being almost flat) with a very shallow transverse impression a little behind the eyes, which are longer than the temples; vertex with very minute scattered punctures, those on the forehead small and widely separated, the median fovea small. Rostrum nearly twice as long as the head, comparatively slender, the subquadangular apical dilatation in ♂ slightly longer than broad, occupying less than half the length of the rostrum and more convex, whereas in ♀ it is distinctly longer than broad, less convex and occupies half the length of the rostrum; the punctuation fine and sparse throughout dorsally but becoming much coarser laterally on the basal half. Antennae with the scape much longer than the funicle (4:3), the latter with joint 2 longer than 1. Prothorax about as long as broad, gently rounded laterally, widest at about the middle, more narrowed in front and very shallowly constricted at the apex; the dorsum evenly set with strong separated punctures, without any smooth stripes, and with a subquadrate median basal depression extending for less than one-third of the length and containing coarse confluent punctures and an irregular median carina; the base constricted, with the angles slightly projecting. Elytra much wider at the roundly rectangular shoulders than the prothorax, parallel-sided from there to beyond the middle, flattened only on the basal half as far as stria 3; the striae deep, with strong separated punctures which diminish behind, striae 1-3 deeper at the apex; the distal intervals broader than the striae, with an irregular row of minute punctures, 9 only slightly costate at the apex. Underside: the distances between the three pairs of coxae in the ratio of 1:3:3.

Length 3.5-5.0 mm., breadth 1.0-1.7 mm.

Alt. 5,600 ft., 17 ♂, 18 ♀, vi-vii, 1938.

The form and sculpture of the pronotum is very similar to that of *C. immeritus*, Fhs., 1871, but in the latter species the sides are more abruptly narrowed near the apex, the punctures are considerably larger, and the basal depression is shorter and less well defined; moreover the apical dilatation of the rostrum is almost obsolete.

PLATE 9.



New Curculionidae from Chyulu Hills.

EXPLANATION OF PLATE.

1. *Cadoderus lepidus*, Mshl., sp. n. ♂.
2. *Ischnobrotus gedyei*, Mshl., sp. n. ♂.
3. *Tapinomorphus humerosus*, Mshl., sp. n. ♂.
4. *Aparopionella cristata*, Mshl., sp. n. ♀.
5. *Ctenomerus hoplocnemis*, Mshl., sp. n. ♀.
6. *Endeochetus turneri*, Mshl., sp. n. ♂.
7. *Apotmetus vansomereni*, Mshl., sp. n. ♂.
8. *Subleptospyris sparsuta*, Mshl., sp. n. ♀.

Cossonus sp.

1 ex., July, 5,600 ft.

Pseudomimus amitus, Voss.

1 ex., June, 5,600 ft. Recently described from Usambara.

Pseudomesites collaris, sp. n.

♂ ♀. Black, rather shiny; elytra with a broad testaceous-brown stripe between striae 3 and 6, but widening near the base to 2 and 7, and covering the whole posterior declivity except the suture.

Head with fairly numerous small separated punctures, the forehead similarly punctate and about five-sixths as wide as the base of the rostrum, with an obsolescent median fovea. *Rostrum* longer than the head and more than half as long as the pronotum (4:7), slightly widened at the middle and parallel-sided from there to the apex, with fine separated punctures throughout; scrobes regularly curved and attaining the lower angle of the eyes; rostrum of ♀ a little narrower and with the apical dilatation less evident. *Antennae* inserted at the middle of the rostrum, red-brown, with the club paler; scape as long as the first five funicular joints; funicle with joint 1 longer than 2, 2 slightly longer than 3, 3-7 subequal, transverse, closely set, not widening distally. *Prothorax* of ♂ as long as broad, the width being equal to the width of the elytra at their shoulders, parallel-sided in the middle and rather abruptly narrowed both in front and behind, being thus almost octagonal, only very shallowly constricted into a collar at the apex, which is narrower than the truncate base; the dorsum slightly flattened in the middle of the disk, but sloping rather steeply at the base, finely coriaceous, evenly and closely set with small separated punctures; prothorax of ♀ a little longer than broad (7:6), slightly narrower than the elytra at their shoulders, not flattened on the disk and sloping less steeply at the base. *Elytra* truncate at the base, very gradually widening from the rectangularly rounded shoulders to two-thirds the length, with deep striae containing strong separated punctures which diminish behind; the intervals convex, shiny, each with a single irregular row of minute punctures. *Legs* testaceous brown; femora almost impunctate, without setae; front tibiae rather abruptly dilated beneath on the apical half, the margin of the dilatation being sinuate; tarsi with joint 4 very narrow at the base and rather abruptly clavate. *Sternum* with the mesosternal process more than three times as wide as the very narrow prosternal one.

Length 2.8-3.3 mm., breadth 0.9-1.1 mm.

Alt. 5,600 ft., 2 ♂, 1 ♀, vi-vii, 1938.

The unusually broad prothorax distinguishes this small species from all its known congeners.

Pseudomesites suturifer, sp. n.

Head and rostrum black, pronotum red-brown, except for the apical margin which is broadly and indefinitely blackish and the lateral margins which are narrowly so; elytra red-brown dorsally as far as stria 7, except interval 1 which is blackish throughout, underside (including margins of elytra) entirely black.

Head with very sparse fine punctures; forehead four-fifths as wide as the base of the rostrum with larger unevenly distributed punctures and a variable median fovea. *Rostrum* short, a little longer than the head, broad, gradually widening from base to apex, rather shiny, with small separated punctures throughout, scrobes bent sharply downwards immediately in front of the eyes. *Antennae* inserted behind the middle of the rostrum, red-brown, with the club fuscous; scape comparatively slender, gradually clavate, as long as the first five funicular joints; funicle with joint 1 much longer than 2, 2-7 transverse, subequal closely approximately, not widening distally. *Prothorax* as long as broad, gently rounded laterally, widest slightly behind the middle, more narrowed in front but not constricted at either base or apex, the basal margin feebly bisinuate; the dorsum rather shiny, fairly evenly set with strong separated punctures. *Elytra* much wider at the rectangularly rounded shoulders than the prothorax (4:3), parallel-sided to beyond the middle; the striae deep, containing strong spaced punctures which diminish behind; the intervals convex, rather shiny, with a single irregular row of minute punctures, and without any setae. *Legs* black, with the tibial uncus and tarsus red-brown; femora almost impunctate, without setae; front tibiae regularly widening from base to apex; tarsi with joint 3 shallowly bilobate on the anterior pairs, scarcely bilobate on the hind pair, joint 4 gradually clavate. *Sternum* with the mesosternal process about three times as wide as the prosternal one.

Length 2.7-3.5 mm., breadth 1.0-1.2 mm.

Alt. 5,200-5,600 ft., 19 ex., v-vii, 1938.

A somewhat aberrant species owing to the lack of any sexual dimorphism, the gradual widening of the rostrum, the more prominent shoulders of the elytra, and the reduction in the lobation of the third tarsal joint.

Pseudomesites sp.

1 ex., April, 5,600 ft.

Stenoscelis binodifer, sp. n.

Piceous to red-brown, rather shiny, the head and prothorax usually darker than the elytra; antennae and tarsi honey-coloured.

Head finely shagreened, with small punctures that are separated by spaces equal to their own diameters; eyes quite flat. *Rostrum* parallel-sided, with small separated punctures, and with a short longitudinal impression in front of it, both of these being often more or less obsolete; the dorsal outline flat; the epistome with two elongate punctures in the middle. *Prothorax* transverse (5:6), widest near the base, shallowly sinuate laterally in the middle, and moderately constricted into a collar at the apex, the constriction being continued shallowly across the dorsum, the apical margin feebly sinuate in the middle; the dorsum with rather large punctures which are wider than the intervals and become larger and confluent laterally. *Elytra* cylindrical, not wider behind, 2.3 times as long as the prothorax, with deep striae throughout, the contained punctures small and close, stria 3 reaching the base, but not stria 2; the intervals about as broad as the striae dorsally, with an irregular row of small punctures, which are replaced on the declivity by minute sharp granules, there being a much larger prominent granule at the apical junction of intervals 3 and 9; ints. 2 and 3 uniting at the base and there rather tumid and rugulose, the bases of 4 and 6 being also somewhat rugulose; the setae on the declivity minute and recumbent.

Length 3-4 mm., breadth 1.0-1.2 mm.

Alt. 5,600 ft., 23 ex., vi-vii, 1938.

From all the three previously described African species of *Stenoscalis-hylastoides*, Woll., 1861 (the Cape, St. Helena), *crassifrons*, Woll., 1873 (Natal), and *scutellatus*, Hust., 1936 (Abyssinia), the present species may be readily distinguished by the two prominent subapical granules on the elytra.

There are in addition three specimens of Cossoninae belonging to three different species of which the generic position is uncertain.